

SEATTLE CITY LIGHT  
**MATERIAL STANDARD**

STANDARD NUMBER: **6877.3**  
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DATE: April 26, 1994  
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**AUTOTRANSFORMER, 100 VA, 277/125V**

**1. GENERAL**

This specification covers single-phase, 60 Hertz, dry-type autotransformers that will be used to supply power to network monitoring transmitters and will be installed within a network protector case.

**2. RATINGS**

- 2.1 Primary Voltage (Terminals 1-3): 277 volts
- 2.2 Secondary Voltage (Terminals 2-3): 125 volts
- 2.3 Frequency: 60 Hertz
- 2.4 Secondary Load Current: 0.83 amperes
- 2.5 Regulation: 5% maximum at 125° C. ambient, no load to full load.

**3. ENVIRONMENTAL REQUIREMENTS**

- 3.1 Temperature: -20° C. to 150° C. Internal temperature rise at nominal load shall not exceed 150° C.
- 3.2 Humidity: 0% to 95% relative humidity.

**4. DIELECTRIC WITHSTAND**

- 4.1 Primary winding shall withstand 3.5 kV RMS, 60 Hz, applied between it and the core for 5 seconds.

**5. PHYSICAL REQUIREMENTS**

- 5.1 Mounting: 0.125 inch rolled steel brackets suitable for chassis mounting.
- 5.2 Terminals: Insulated stranded wire, No. 20 AWG, 200° C. Teflon insulation, color coded, minimum 18 inches long.
- 5.3 Corrosion Protection: Metallic surfaces shall be cadmium plated or equivalent. Windings shall be impregnated against moisture.
- 5.4 Grounding: The core shall be grounded to the mounting brackets.
- 5.5 Marking: Markings shall include manufacturer's name, voltage, current, and frequency ratings, and terminal identification.
- 5.6 Maximum size: 3.0 inches wide, 4.0 inches long, 3.5 inches high.

**6. APPROVED MANUFACTURERS**

Tierney Electrical Mfg. Co.      Model AC100A-277V125A

**7. STOCK NUMBER    687730**

ORIGINATOR	STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
			